

ABSTRACT

An explosion-proof instrument quick disconnect and seal is provided for use in hazardous (*e.g.*, explosive) environments to quickly connect or disconnect energized or de-energized electrical circuits. The quick disconnect and seal includes mating electrical receptacle inserts positioned within a male and a female portion. The male and female portions are connected to one another by a coupling nut having threads that engage mating threads on the male portion, thereby moving the male portion relative the female portion by rotation of the coupling nut, while at the same time preventing the electrical connection of the mating receptacle inserts in the male and female portions before the explosion-proof chamber is secure.